



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SRIKRISHNA TALLURI

Group Art Unit: 2176

Examiner: Tran, Quoc A.

Serial No.: 09/711,791

Filed: November 13, 2000

For: METHOD AND SYSTEM FOR USING A COMMUNICATIONS NETWORK  
TO ARCHIVE AND RETRIEVE BIBLIOGRAPHY INFORMATION AND  
REFERENCE MATERIAL

Attorney Docket No.: BUO 0101 PUS

APPEAL BRIEF UNDER 37 C.F.R. § 41.37 AND  
PETITION FOR EXTENSION OF TIME  
UNDER 37 C.F.R. § 1.136(a)

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Sir:

The Applicant hereby petitions for a four (4) month extension of time to respond to the Notice of Appeal mailed April 6, 2005, thereby extending the time period within which to respond to October 6, 2005. A check is enclosed to cover the small entity four month extension of time fee of \$795.00 pursuant to 37 C.F.R. § 1.17(a)(4). Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

This is an Appeal Brief for the appeal from the final rejection of claims 1-23 and 25-41 of the final Office Action mailed December 9, 2004 for the above-identified application.

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### **I. REAL PARTY IN INTEREST**

The Appellant has not assigned its rights, and is under no obligation to assign its rights. Therefore, the Appellant is the real party in interest. However, Business One, Inc., a corporation organized under the laws of the state of Michigan and having a place of business in Southfield, Michigan may have certain rights and interests in this application.

### **II. RELATED APPEALS AND INTERFERENCES**

There are no appeals or interferences known to the Appellant or the Appellant's legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### **III. STATUS OF CLAIMS**

Claims 1-23 and 25-41 are pending in this application. Claim 24 has been cancelled. Claims 1-23 and 25-41 have been rejected and are the subject of this appeal. Of claims 1-23 and 25-41, claims 1, 13, 25-26, 30, and 35 are the only independent claims.

### **IV. STATUS OF AMENDMENTS**

The Appellant mailed an Amendment After Final on February 9, 2005 in response to the final Office Action mailed December 9, 2004. In the Advisory Action mailed March 9, 2005, the Examiner indicated that the proposed amendments made in the Amendment After Final will be entered for purposes of appeal. Thus, the Amendment After Final has been accepted for entry.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

### **1. Independent Claim 1**

Independent claim 1 recites a system (10) for archiving reference material cited in a bibliography (70) of a manuscript. (The title; page 1, lines 5-9; page 4, line 14 through page 6, line 2; page 10, lines 1-20; FIGS. 1, 2, and 5.)

The system (10) includes a first communications device (14) connected to the Internet (12). (Page 5, line 21 through page 6, line 9; page 7, lines 17-24; page 11, lines 11-15; page 15, lines 1-17; FIGS. 1 and 3.) An author (14) of a manuscript uses the first communications device (14) to transfer identification of reference material cited by the author (14) in the bibliography (70) of the manuscript to the Internet (12). (Page 5, line 21 through page 6, line 9; page 7, line 25 through page 8, line 1; page 10, lines 1-20; page 11, lines 17-21; page 12, lines 1-9; page 13, lines 10-15; page 15, lines 1-17; FIGS. 1-3 including operation block 24 of FIG. 2.) The cited reference material includes a web site and the identification includes identification of the web site. (Page 4, lines 18-21; page 6, line 24 through page 7, line 4; page 10, line 1 through page 11, line 4; page 11, lines 17-19; page 12, lines 1-8; page 13, lines 13-16; page 14, lines 1-5; page 15, lines 1-17; page 17, line 16 through page 18, line 2; FIGS. 1-5.)

The system (10) further includes a second communications device (16) connected to the Internet (12). (Page 5, line 21 through page 6, line 9; page 7, lines 17-24; page 12, lines 18-24; page 15, line 18 through page 16, line 1; FIGS. 1 and 4.) An audience (16) of the manuscript uses the second communications device (16) to request and receive a copy of the reference material cited by the author (14) in the manuscript from the Internet (12). (Page 5, line 21 through page 6, line 9; page 8, lines 3-9; page 10, line 1 through page 11, line

4; page 12, lines 18-27; page 14, lines 9-15; page 15, line 18 through page 16, line 1; FIGS. 1-2 and 4 including operation blocks 38, 40 of FIG. 2.)

The system (10) further includes a database (18) connected to the Internet (12). (Page 5, line 21 through page 6, line 16; page 7, lines 17-24; page 10, line 1 through page 11, line 4; page 11, lines 15-17; FIGS. 1-2.) The database (18) receives a copy of the web site from the Internet (12) in response to the author (14) transferring the web site identification to the Internet (12) such that the copy of the web site received by the database (18) is verbatim to the web site as on the Internet (12) at the time the author (14) transferred the web site identification to the Internet (12). (Page 6, lines 10-16; page 8, lines 3-4 and lines 16-25; page 10, lines 12-15; page 10, line 21 through page 11, line 4; page 12, lines 7-14; page 12, line 27 through page 13, line 9; page 13, lines 15-23; page 15, lines 1-17; FIGS. 1-2 including operation blocks 24, 26 of FIG. 2.) The database (18) stores the copy of the web site and transfers a copy of the stored copy of the web site to the audience (16) via the Internet (12) and the second communications device (16) in response to receiving a request from the audience (16) for a copy of the web site whereby the copy of the web site received by the audience (16) is verbatim to the web site as on the Internet (12) at the time the author (14) transferred the web site identification to the Internet (12). (Page 6, lines 10-16; page 8, lines 6-9; page 10, line 1 through page 11, line 10; page 12, line 15 through page 13, line 9; page 13, line 18 through page 14, line 17; page 15, line 18 through page 16, line 2; FIGS. 1-2 including operation blocks 38, 40 of FIG. 2.)

## **2. Independent Claim 13**

Independent claim 13 recites a method for archiving reference material cited in a bibliography (70) of a manuscript by an author (14) of the manuscript. (The title; page 1, lines 5-9; page 4, line 14 through page 6, line 2; page 10, lines 1-20; FIGS. 1, 2, and 5.)

The method includes an author (14) of a manuscript transmitting identification of reference material cited by the author (14) in the bibliography (70) of the manuscript to the Internet (12) using a first communications device (14) connected to the Internet (12). (Page 5, line 21 through page 6, line 9; page 7, line 25 through page 8, line 1; page 10, lines 1-20; page 11, lines 17-21; page 12, lines 1-9; page 13, lines 10-15; page 15, lines 1-17; FIGS. 1-3 including operation block 24 of FIG. 2.) The cited reference material includes a web site and the identification includes identification of the web site. (Page 4, lines 18-21; page 6, line 24 through page 7, line 4; page 10, line 1 through page 11, line 4; page 11, lines 17-19; page 12, lines 1-8; page 13, lines 13-16; page 14, lines 1-5; page 15, lines 1-17; page 17, line 16 through page 18, line 2; FIGS. 1-5.)

The method further includes transferring a copy of the web site from the Internet (12) to a database (18) connected to the Internet (12) in response to the author (14) transmitting the web site identification to the Internet (12) such that the copy of the web site transferred to the database (18) is verbatim to the web site as on the Internet (12) at the time the author (14) transmitted the web site identification to the Internet (12). A copy of the web site is then stored at the database (18). (Page 6, lines 10-16; page 8, lines 3-4 and lines 16-25; page 10, lines 12-15; page 10, line 21 through page 11, line 4; page 12, lines 7-14; page 12, line 27 through page 13, line 9; page 13, lines 15-23; page 15, lines 1-17; FIGS. 1-2 including operation blocks 24, 26 of FIG. 2.)

The method further includes transmitting a request for a copy of the web site from an audience (16) of the manuscript to the database (18) via the Internet (12) using a second communications device (16) connected to the Internet (12). (Page 5, line 21 through page 6, line 9; page 8, lines 4-6; page 14, lines 9-12; FIGS. 1-2 including operation block 38 of FIG. 2.)

The method further includes transmitting a copy of the stored copy of the web site from the database (18) to the audience (16) via the Internet (12) and the second communications device (16) in response to the database (18) receiving the request for a copy of the web site from the audience (16) whereby the copy of the web site transmitted from the database (18) to the audience (16) is verbatim to the web site as on the Internet (12) at the time the author (14) transmitted the web site identification to the Internet (12). (Page 6, lines 10-16; page 8, lines 6-9; page 10, line 1 through page 11, line 10; page 12, line 15 through page 13, line 9; page 13, line 18 through page 14, line 17; page 15, line 18 through page 16, line 2; FIGS. 1-2 including operation blocks 38, 40 of FIG. 2.)

### **3. Independent Claim 25**

Independent claim 25 recites a system (10) for storing a reference material using a communications network (12). (The title; page 1, lines 5-9; page 4, line 14 through page 6, line 2; page 10, lines 1-20; FIGS. 1, 2, and 5.)

The system (10) includes a first communications device (14) connected to the communications network (12) for an author (14) of a manuscript to use. (Page 5, line 21 through page 6, line 9; page 7, lines 17-24; page 11, lines 11-15; page 15, lines 1-17; FIGS. 1 and 3.) The author (14) uses the first communications device (14) to transfer a copy of the reference material and reference material availability information to the communications network (12). (Page 16, line 23 through page 17, line 15.)

The system (10) further includes a second communications device (16) connected to the communications network (12) for an audience (16) of the manuscript to use. (Page 5, line 21 through page 6, line 9; page 7, lines 17-24; page 12, lines 18-24; page 15, line 18 through page 16, line 1; FIGS. 1 and 4.) The audience (16) uses the second communications device (16) to request and receive a copy of the reference material and the

reference material availability information from the communications network (12). (Page 16, line 23 through page 17, line 15.)

The system (10) further includes a database (18) connected to the communications network (12) to communicate with the author (14) and the audience (16) via the communications network (12). (Page 5, line 21 through page 6, line 16; page 7, lines 17-24; page 10, line 1 through page 11, line 4; page 11, lines 15-17; FIG. 1.) The database (18) receives a copy of the reference material and the reference material availability information from the author (14). (Page 16, line 23 through page 17, line 15.) The database (18) stores an immutable copy of the reference material and the reference material availability information and a distinctive key associated with the copy of the reference material and the reference material availability information. (Page 16, line 23 through page 17, line 15.)

If the reference material is available, the database (18) transmits a copy of the reference material to the audience (16) in response to receiving a request from the audience (16) for a copy of the reference material. (Page 16, line 23 through page 17, line 15.) If the reference material is not available, the database (18) transmits a copy of the reference material availability information to the audience (16) in response to receiving a request from the audience (16) for a copy of the reference material. (Page 16, line 23 through page 17, line 15.)

#### **4. Independent Claim 26**

Independent claim 26 recites a system (10) for archiving a web site cited in a manuscript by an author (14) of the manuscript. (The title; page 1, lines 5-9; page 4, line 14 through page 6, line 2; page 10, lines 1-20; FIGS. 1, 2, and 5.)

The system (10) includes a first communications device (14) connected to the world wide web (12). (Page 5, line 21 through page 6, line 9; page 7, lines 17-24; page 11, lines 11-15; page 15, lines 1-17; FIGS. 1 and 3.) An author (14) of a manuscript uses the first communications device (14) to transfer web site identification to the web (12). (Page 5, line 21 through page 6, line 9; page 7, line 25 through page 8, line 1; page 10, lines 1-20; page 11, lines 17-21; page 12, lines 1-9; page 13, lines 10-15; page 15, lines 1-17; FIGS. 1-3 including operation block 24 of FIG. 2.) The web site identification identifies a web site cited in the manuscript by the author (14). (Page 4, lines 18-21; page 6, line 24 through page 7, line 4; page 10, line 1 through page 11, line 4; page 11, lines 17-19; page 12, lines 1-8; page 13, lines 13-16; page 14, lines 1-5; page 15, lines 1-17; page 17, line 16 through page 18, line 2; FIGS. 1-5.)

The system (10) further includes a second communications device (16) connected to the web (12). (Page 5, line 21 through page 6, line 9; page 7, lines 17-24; page 12, lines 18-24; page 15, line 18 through page 16, line 1; FIGS. 1 and 4.) An audience (16) of the manuscript uses the second communications device (16) to request and receive a copy of the web site. (Page 5, line 21 through page 6, line 9; page 8, lines 3-9; page 10, line 1 through page 11, line 4; page 12, lines 18-27; page 14, lines 9-15; page 15, line 18 through page 16, line 1; FIGS. 1-2 and 4 including operation blocks 38, 40 of FIG. 2.)

The system (10) further includes a database (18) connected to the web (12). (Page 5, line 21 through page 6, line 16; page 7, lines 17-24; page 10, line 1 through page 11, line 4; page 11, lines 15-17; FIGS. 1-2.) The database (18) receives a copy of the web site from the web (12) in response to the author (14) transferring the web site identification to the web (12) such that the copy of the web site received by the database (18) is verbatim to the web site as on the web (12) at the time the author (14) transferred the web site identification to the web (12). (Page 6, lines 10-16; page 8, lines 3-4 and lines 16-25; page 10, lines 12-15; page 10, line 21 through page 11, line 4; page 12, lines 7-14; page 12, line 27 through page 13, line



9; page 13, lines 15-23; page 15, lines 1-17; FIGS. 1-2 including operation blocks 24, 26 of FIG. 2.)

The database (18) then stores the copy of the web site. The database (18) transfers a copy of the stored copy of the web site to the audience (14) via the web (12) and the second communications device (16) in response to receiving a request from the audience (14) for a copy of the web site whereby the copy of the web site received by the audience (14) is verbatim to the web site as on the web (12) at the time the author (14) transferred the web site identification to the web (12). (Page 6, lines 10-16; page 8, lines 6-9; page 10, line 1 through page 11, line 10; page 12, line 15 through page 13, line 9; page 13, line 18 through page 14, line 17; page 15, line 18 through page 16, line 2; FIGS. 1-2 including operation blocks 38, 40 of FIG. 2.)

## **5. Independent Claim 30**

Independent claim 30 recites a method for archiving a web site cited in a manuscript by an author (14) of the manuscript. (The title; page 1, lines 5-9; page 4, line 14 through page 6, line 2; page 10, lines 1-20; FIGS. 1, 2, and 5.)

The method includes transferring web site identification from an author (14) of a manuscript to the world wide web (12). (Page 5, line 21 through page 6, line 9; page 7, line 25 through page 8, line 1; page 10, lines 1-20; page 11, lines 17-21; page 12, lines 1-9; page 13, lines 10-15; page 15, lines 1-17; FIGS. 1-3 including operation block 24 of FIG. 2.) The web site identification identifies a web site cited in the manuscript by the author (14). (Page 4, lines 18-21; page 6, line 24 through page 7, line 4; page 10, line 1 through page 11, line 4; page 11, lines 17-19; page 12, lines 1-8; page 13, lines 13-16; page 14, lines 1-5; page 15, lines 1-17; page 17, line 16 through page 18, line 2; FIGS. 1-5.)

The method further includes transferring a copy of the web site from the web (12) to a database (18) in response to the author (14) transferring the web site identification to the web (12) such that the copy of the web site transferred to the database (18) is verbatim to the web site as on the web (12) at the time the author (14) transferred the web site identification to the web (12). The copy of the web site is then stored in the database (18). (Page 6, lines 10-16; page 8, lines 3-4 and lines 16-25; page 10, lines 12-15; page 10, line 21 through page 11, line 4; page 12, lines 7-14; page 12, line 27 through page 13, line 9; page 13, lines 15-23; page 15, lines 1-17; FIGS. 1-2 including operation blocks 24, 26 of FIG. 2.)

The method further includes transferring a copy of the stored copy of the web site from the database (18) to the audience (16) via the web (12) in response to a request from the audience (16) for a copy of the web site. (Page 6, lines 10-16; page 8, lines 6-9; page 10, line 1 through page 11, line 10; page 12, line 15 through page 13, line 9; page 13, line 18 through page 14, line 17; page 15, line 18 through page 16, line 2; FIGS. 1-2 including operation blocks 38, 40 of FIG. 2.)

## **6. Independent Claim 35**

Independent claim 35 recites a method for archiving information cited in a manuscript. (The title; page 1, lines 5-9; page 4, line 14 through page 6, line 2; page 10, lines 1-20; FIGS. 1, 2, and 5.)

The method includes citing a web site in a manuscript. Prior to any modifications to the web site after the web site has been cited in the manuscript, the method further includes transferring a web site address to a database (18) via the Internet (12). (Page 5, line 21 through page 6, line 9; page 7, line 25 through page 8, line 1; page 10, lines 1-20; page 11, lines 17-21; page 12, lines 1-9; page 13, lines 10-15; page 15, lines 1-17; FIGS. 1-3 including operation block 24 of FIG. 2.) The web site address identifies the address of the web

site on the Internet (12). (Page 4, lines 18-21; page 6, line 24 through page 7, line 4; page 10, line 1 through page 11, line 4; page 11, lines 17-19; page 12, lines 1-8; page 13, lines 13-16; page 14, lines 1-5; page 15, lines 1-17; page 17, line 16 through page 18, line 2; FIGS. 1-5.)

The method further includes providing a copy of the web site from the Internet (12) to the database (18) in response to the web site address being transferred to the database (18) such that the copy of the web site provided to the database (18) is verbatim to the web site as on the Internet (12) at the time the web site was cited in the manuscript. The copy of the web site is then stored in the database (18). (Page 6, lines 10-16; page 8, lines 3-4 and lines 16-25; page 10, lines 12-15; page 10, line 21 through page 11, line 4; page 12, lines 7-14; page 12, line 27 through page 13, line 9; page 13, lines 15-23; page 15, lines 1-17; FIGS. 1-2 including operation blocks 24, 26 of FIG. 2.)

The method further includes transferring a copy of the stored copy of the web site from the database (18) to an audience (16) of the manuscript via the Internet (12) in response to a request from the audience (16) for a copy of the web site such that the copy of the web site transferred to the audience (16) is verbatim to the web site as on the Internet (12) at the time the web site was cited in the manuscript. (Page 6, lines 10-16; page 8, lines 6-9; page 10, line 1 through page 11, line 10; page 12, line 15 through page 13, line 9; page 13, line 18 through page 14, line 17; page 15, line 18 through page 16, line 2; FIGS. 1-2 including operation blocks 38, 40 of FIG. 2.)

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1-6, 9-10, 13-17, 20-21, and 25-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,970,505 issued to Ebrahim ("Ebrahim") in view of U.S. Patent No. 6,725,203 issued to Seet et al. ("Seet").

Claims 7-8, 11-12, 18-19, and 22-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ebrahim in view of Seet in further view of U.S. patent publication 2002/0152215 issued to Clark et al. ("Clark") (based on provisional patent application 60/243,259).

## VII. ARGUMENT

### A. **Claims 1-6, 9-10, 13-17, 20-21, and 25-41 are patentable under 35 U.S.C. § 103(a) over Ebrahim in view of Seet**

#### *1. Background of the Claimed Invention*

As set forth in the Background Art section of the Appellant's specification, information available on web sites on the World Wide Web, e.g., the Internet, have become an indispensable source for research. However, web based information is not merely an electronic version of a physical publication (such as books, newspapers, magazines, etc.), but is rather a standalone medium with no physical equivalents.

Authors cite information obtained from web sites in their manuscripts. In the bibliography section of the manuscript, authors generally include three pieces of web site identification information when citing web sites: i) the address of the web site (i.e., a uniform resource locator (URL) such as www.website.com; ii) date the author accessed the web site; and iii) the last modified date of the web site. A problem with citing web sites as sources of information is that i) web sites are subject to frequent, invisible modification; and ii) web sites may be moved to a new address or removed from the Internet without notice.

An important reason for citing reference material from any source such as the Internet and traditional published material is to enable verification of the reference material. The problem with an author citing a web site as reference material in a manuscript is that the

fluid, ever modifiable potential of the content of the web site does not guarantee availability and true verification of the web site material actually used by the author.

As further evidence of the problem with citing web sites, the Appellant includes herewith in the Evidence Appendix a copy of an article previously submitted by the Appellant with the Amendment dated June 10, 2004. This article is entitled “Here Today, Gone Tomorrow: Studying How Online Footnotes Vanish” by Carlson, <http://chronicle.com>, April 2004 - published in 'The Chronicle of Higher Education' (<http://chronicle.com>). The article describes the problem associated with “the half-life of Internet footnotes” and how this problem arises from “the typical length of time it takes for half of the Web addresses in a scholarly article to become outdated, broken, or changed.” A study described in the article noted that the half life of links to web sites was just over a year. The article notes that it is a goal to allow “the Web and Internet-related topics [to be] investigated with the same reliability that one would find in the library.”

Also, as further evidence of the problem with citing web sites, the Appellant includes herewith in the Evidence Appendix a copy of the article entitled, “Scholars Note ‘Decay’ of Citations to Online References” by Carlson, <http://chronicle.com>, March 2005 – published in 'The Chronicle of Higher Education' (<http://chronicle.com>). This article notes the problem of “how Web links stop working, or ‘decay,’ as those sites change addresses or shut down.” Particularly, this article notes:

After analyzing more than 1,126 citations that make reference to Web addresses, taken from online versions of five prestigious communication-studies journals, 373 of the links, or 33 percent, were found to be dead. Of the 753 of the links that worked, only 424 pointed to information pertinent to the citation.

As such, what is needed is a method and system which enable an audience of a manuscript, which may be reading the manuscript years after the manuscript has been written

by an author, to obtain an exact copy of the web sites cited by the author in the manuscript as reference material at the time the author wrote the manuscript. The claimed invention satisfies this need.

2. **The Claimed Invention**

a. **Independent Claims 1, 13, 26, 30, 35**

The claimed invention, as set forth in independent claims 1, 13, 26, 30, and 35, is generally directed to methods and systems for archiving web sites cited in a manuscript by an author of a manuscript. As indicated above, web sites are updated frequently and thus cannot guarantee availability/true verification of material from the web sites actually cited by the author. In order to guarantee availability/true verification of web sites actually cited by the author, the claimed invention as recited in independent claims 1, 13, 26, 30, and 35 generally incorporates the following limitations:

1. A database receives a copy of a web site cited in a manuscript such that the copy of the web site is verbatim to the web site as on the Internet (i.e., world wide web) at the time the web site was cited.

2. The database stores the copy of the web site. As such, if the web site is updated subsequent to the time at which the web site was cited, then the updated web site and the stored copy of the web site will be different from one another. The stored copy of the web site being different from the updated web site is a desirous result because the goal is to be able to obtain from the database a copy of the web site in the form that it was as on the Internet at the time the web site was cited, i.e., the goal is to be able to obtain a copy of the web site without the subsequent updates. This goal is satisfied as one can obtain from the database a copy of the web site in the form that it was in as on the Internet at the time the web

site was cited whether or not the web site has been subsequently updated, moved, removed, etc.

As set forth in representative independent claim 1, in one embodiment, the system includes first and second communications devices and a database connected to the Internet. An author of a manuscript uses the first device to transfer identification of a web site cited by the author in the bibliography of the manuscript to the Internet. The database receives a copy of the web site from the Internet in response to the author transferring the web site identification to the Internet such that the copy of the web site received by the database is verbatim to the web site as on the Internet at the time the author transferred the web site identification to the Internet. The database transfers a stored copy of the web site to an audience of the manuscript via the Internet in response to receiving a request from the audience for a copy of the web site whereby the copy of the web site received by the audience is verbatim to the web site as on the Internet at the time the author transferred the web site identification to the Internet.

3. *Ebrahim and Seet*

a. *The Examiner's Characterization of Ebrahim and Seet*

In the final Office Action, the Examiner posited that Ebrahim teaches the limitations set forth in the independent claims including “an author of a manuscript transmitting identification of reference material cited by the author in the bibliography of the manuscript to the Internet using a first communications device connected to the Internet. Wherein the cited reference material includes a web site and the identification includes identification of the web site; transferring a copy of the web site from the Internet to a database connected to the Internet in response to the author transmitting the web site identification to the Internet . . . ; storing at the database a copy of the web site; transmitting a request for a copy of the web site

from an audience of the manuscript to the database via the Internet using a second communications device connected to the Internet; and transmitting a copy of the stored copy of the web site from the database to the audience via the Internet and the second communications device in response to the database receiving the request for a copy of the web site from the audience . . .” For these propositions, the Examiner cited col. 1, line 61 through col. 2, line 3 (i.e., collaboration among multiple sets of authors of related documentation books in a documentation set wherein each book in a set written by multiple authors constitutes a single domain, and multiple of these domains constitute the documentation set such that each domain may be independently administered, be geographically dispersed, be on different computer and operating systems, etc.).

The Examiner further cited for these propositions col. 7, line 14 through col. 8, line 18 (i.e., reference to FIG. 2, each time one of the authors 214 updates one of the docunits 218 in the book 212 the tag database 236 is updated by the TagMaker with link information for all of the exportable iunits 222. In this embodiment, the Examiner posited the following: information in the tag database 236 is exported to a corresponding tag repository 286 hosted on a respective network node 280. Authors 214 import iunits 222 from different books 212 by issuing TagFind requests. A TagFind request results in the execution of the TagFinder program, which, in this system architecture, is configured to (1) visit each of the distributed tag repositories 286 in search of the desired iunits and (2) return any relevant link information to the requester. In the preferred embodiment, each node 280 that hosts one of the pieces of the distributed tag repository 286 includes server programs 282 that provide access to that piece. These server programs respond to search requests by the TagFinder . . . Referring to FIG. 4, there is shown a document preparation system wherein the tag repository is implemented as a single, global repository . . . The global node 308 is accessible to all authors 214 . . . the tag repository 306 is implemented as a database that is accessed using search/query functions 310 provided by the global node 308. The query functions 310 are invoked in response to the TagFind requests issued by the various authors and return links to



the authors as described in reference to FIG. 3 . . . the books 212 and tag databases 236 are updated and managed as in the embodiments of FIGS. 3 and 4. Tag repository systems 326 are stored as files on the networked nodes 318, some of which also host a respective book 212. Due to the file system 320, the iunit information in the repository segments 326 is visible to all authors 2143 as separate files in a common, shared directory. An author 214 selects an iunit by simply copying the corresponding file into the target docunit. . .).

As such, the Examiner posited that Ebrahim teaches the limitations set forth in the independent claims with the exception explicitly disclosing “ . . . *such that the copy of the web site transferred to the database is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet . . . whereby the copy of the web site transmitted from the database to the audience is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet.*” The Examiner posited that Seet discloses this limitation (citing col. 12, lines 1-20, i.e., . . . “Static Advertisement Delivery Method” . . . the “pull” method and the “push” method . . .).

The Examiner posited that it would have been obvious to have modified Seet into Ebrahim to provide a way, wherein the copy of the web site transferred to the database is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet . . . whereby the copy of the web site transmitted from the database to the audience is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet.

The Examiner posited that motivation to make this modified combination would be to provide the advantages of enabling an author of a subsection of a document to quickly locate referenced information in other parts of the document or different documents prepared by other authors and then incorporate that information in their own document by importing the

reference, by hypertext link, or by simple copying, among other techniques as taught or suggested by Ebrahim.

***b.     The Appellant's characterization of Ebrahim***

Ebrahim is generally directed "to document preparation systems used to create sets of related documents." (Col. 1, lines 7-8.) The general relevant teachings of Ebrahim are as follows:

In particular, the present invention is a method for linking data in a document set including a plurality of books written by different groups of authors. The first step involves an author of a first book tagging an information unit (iunit) in that book with a tag that provides information about the iunit, including a semantic attribute and a unique identifier. The author then exports the tag to a tag repository that is accessible to all groups of authors. An author of a second book can then access the tag repository and select a tag whose corresponding information they would like to import into the second book. (Col. 2, lines 4-14.)

\* \* \*

The present invention enables authors 214 to find and create links to information in other books 212 so that the common information need only be generated and maintained by the original set of authors 214. As a first step in the linking process authors 214 of a book 212 designate, or tag, information units (hereinafter, "iunits") within a docunit 218. After tagging, the creating authors export the tagged iunits to a tag repository, from which other authors may then import the exported tags. Following exporting, the tag repository includes pointers to the just-exported iunits in the docunit 218. The tag repository can include pointers to iunits exported from any or all of the books 212. (Col. 4, lines 5-15.)

As such, Ebrahim teaches a method to provide enhanced co-operation between a defined (limited) set of authors involved in a writing project/books, etc.; where the original author of a first document tags information in the first document; the original author then exports the tag to a database (the tag including identification of the tagged information and

likely the tagged information itself); other authors of different documents then search the database to find relevant tags; upon finding a relevant tag, these other authors import the associated tagged information into their documents (the tagged information is imported by the other authors from the database or, presumably, from the first document itself). Further, Ebrahim teaches that only the original author can place the tagged information into the database as opposed to other authors who might wish to cite the tagged information as in the claimed invention.

With regards to the tagged information being modified or updated, Ebrahim teaches the following:

Referring again to FIG. 2, in the preferred embodiment whenever a docunit 218 is updated using the editor 220, the editor 220 executes a TagMaker program that scans the docunit 218 and generates/updates the tag database 236 from all of the exportable information within the docunit 218. (Col. 5, lines 27-31.)

\* \* \*

As described in reference to FIG. 2, each time one of the authors 214 updates one of the docunits 218 in the book 212 the tag database 236 is updated by the TagMaker with link information for all of the exportable iunits 222. (Col. 7, lines 19-22.)

\* \* \*

In this system, the books 212 and tag databases 236 are updated and managed as in the embodiments of FIGS. 3 and 4. (Col. 7, lines 64-66.)

\* \* \*

Given this configuration, anytime a user updates a docunit the editor 424 executes the TagMaker 426, which updates the local tag database 444. When an author executes the TagExporter 428, that program exports information 415 from the tag database 444 to the computer 360. When an author 214 executes the TagFinder 430 or the DocFinder 432, corresponding

requests 417, 419 are issued to the computer 360, which returns information regarding the existence of a pointer to the requested iunit or docunit. (Col. 8, lines 37-45.)

Thus, as described above, Ebrahim teaches that upon the original author updating the tagged information, the other authors are only able to import the updated tagged information as opposed to being able to import the tagged information prior to the updates. That is, the other authors are unable to obtain the tagged information in the form that it was in prior to the updates.

*c.      The Appellant's Characterization of Seet*

Seet is generally directed to “a system and method for advertising using an Internet browser with a book-like, flipping page-based interface.” (Col. 1, lines 16-18.) FIGS. 4, 5A, and 5B and the related description thereto of Seet provide for the general relevant teachings of Seet. FIG. 4 depicts an Advertisement Matching/Delivery system 400 for locating and delivering advertisements into a browsing book which is viewed by an audience. In general, an Internet browsing book 402 receives Internet pages from a book 405 at a book site 404 on the Internet. Advertisements are selected from a database of advertisements 410 based on the contents of the Internet pages. The database of advertisements is created as a result of an author 413 generating advertisements for storage in the database. The selected advertisements are incorporated with the Internet pages into the browsing book. As such, the browsing book includes the Internet pages and the selected advertisements for an audience.

Seet discloses two methods for incorporating selected advertisements with the Internet pages in the browsing book 401. These two methods are: the “dynamic advertisement streaming method” (see, generally, col. 11, lines 16-67) and the “static advertisement delivery method.” The static advertisement delivery method can be divided into two methods: the

“push” and the “pull” methods (see, generally, col. 12). Seet provides a general description of the dynamic and static methods:

static advertisements are pre-incorporated into the books 405 before they are downloaded and viewed while dynamic advertisements are streamed into the browsing book 401 as they are being viewed on the Internet browsing book site 402) (Col. 13, lines 38-43.)

Thus, the term “static” refers to a content delivery method where selected advertisements are incorporated into a book 405 at book site 404 prior to a browsing book 401 downloading Internet pages from the book site. Likewise, the term “dynamic” refers to a content delivery method where selected advertisements being incorporated with the Internet pages at the time the Internet pages are downloaded to a browsing book 401.

#### 4. *The Claimed Invention Compared to Ebrahim and Seet*

As indicated above and as noted by the Examiner with respect to the Examiner’s characterization of Ebrahim, the claimed invention generally includes:

an author of a manuscript transmitting identification of a web site cited by the author in the bibliography of the manuscript to the Internet;  
transferring a copy of the web site from the Internet to a database in response to the author transmitting the web site identification to the Internet;  
storing at the database a copy of the web site;  
transmitting a request for a copy of the web site from an audience of the manuscript to the database via the Internet; and  
transmitting a copy of the stored copy of the web site from the database to the audience via the Internet in response to the database receiving the request for a copy of the web site from the audience.

As such, the claimed invention is generally directed to an author of a manuscript incorporating into the manuscript reference material obtained from a web site. The author then cites the web site in the bibliography of the manuscript and transmits identification of the web

site to the Internet. In response to the author providing identification of the web site to the Internet, a database receives a copy of the web site from the Internet. Thus, the manuscript itself contains a cite to the web site and not the web site *per se*. However, the database stores a copy of the web site. The audience of the manuscript is then able to obtain the stored copy of the web site from the database.

In contrast, Ebrahim teaches that an author of a document tags information in the document; the author then exports the tag to a database (the tag includes identification of the tagged information and possibly the tagged information itself). As such, an audience can obtain a copy of the tagged information from the database (if the tagged information is provided to the database) or directly from the document itself (whether or not the tagged information is provided to the database). However, in any event, the tagged information is information which is itself contained in the document.

Accordingly, a difference between the claimed invention and Ebrahim is the following. In the claimed invention, information incorporated by an author in the author's manuscript which the author obtained from a web site is contained in the manuscript as opposed to the web site itself being contained in the manuscript. Thus, a copy of the web site as opposed to a portion of the author's manuscript incorporating the information obtained from the web site is stored in a database for subsequent audience retrieval. Whereas in Ebrahim, a portion of the author's document itself is stored in a database for subsequent audience retrieval.

In sum, the claimed invention is directed to storing web sites in a database for subsequent audience retrieval. The web sites themselves are not part of an author's manuscript. Rather, the author has obtained information from the web sites and incorporated such information into the author's manuscript. In contrast, Ebrahim is directed to storing portions of an author's manuscript in a database for subsequent audience retrieval. Therefore,

Ebrahim does not teach or suggest that the “tagged information” stored by a database is equivalent to web sites as claimed.

Further, the Appellant submits that the claimed “web site” and the advertisements of Seet are not equivalent to one another. In general, a web site is subject to any number of invisible modifications and may be revised any number of times and at any time by an author of the web site. Seet discloses that the contents (i.e., Internet web pages) displayed to the audience in browsing book 401 are loosely related HTML pages and that the advertisements are inserted into this content. Such advertisements are submitted by advertisers to the advertising database as fixed, unchangeable files which are not subject to invisible modifications as compared with actual web sites.

A web site is defined as “a set of interconnected web pages, usually including a homepage, generally located on the same server, and prepared and maintained as a collection of information by a person, group, or organization” ([www.dictionary.com](http://www.dictionary.com)). A web page is defined as “a document on the World Wide Web, consisting of an HTML file and any related files for scripts and graphics, and often hyperlinked to other documents on the Web” ([www.dictionary.com](http://www.dictionary.com)). Clearly, the advertisements of Seet are not web sites nor web pages *per se* as the advertisements are inserted into web pages (i.e., the HTML pages).

Therefore, the Appellant posits that Seet does not teach or suggest “. . . such that the copy of the web site transferred to the database is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet . . . whereby the copy of the web site transmitted from the database to the audience is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet” as claimed.

5. *Improper Combination of Ebrahim and Seet*

As described above, Ebrahim teaches that the tagged information provided by an author to a database at a given time is subsequently updated at a future time without having the author transfer the updates to the database. That is, the tagged information is continually updated. Accordingly, if an audience wants tagged information that was provided by the author to the database at a past time, then this tagged information will be unavailable from the database at a future time if the author has subsequently changed the tagged information.

As such, in Ebrahim, the tagged information stored in the database is subject to modifications and the modifications result in the tagged information stored in the database being modified. This teaching is in direct contrast to the claimed invention in which the web sites, which are also subject to modifications, are stored in the database and future updates are ignored by the database.

As described above, Seet teaches that the advertisements provided by an author to a database are stored in the database as fixed, unchangeable files which are not subject to modifications. Again, this teaching is in direct contrast to the claimed invention in which the database stores information (i.e., web sites) which are subject to modifications.

The combination of Ebrahim and Seet is improper as Ebrahim teaches that information stored in a database is modified in the database after it has been stored whereas Seet teaches that the nature of information stored in a database is not modifiable after it has been stored. Thus, modifying Ebrahim with Seet as posited by the Examiner would result in defeating the purpose of Ebrahim which is to update stored information.

Further, the Appellant notes that the publisher of both of the attached articles:  
(i) "Here Today, Gone Tomorrow: Studying How Online Footnotes Vanish" by Carlson, April



2004 - published in 'The Chronicle of Higher Education' (<http://chronicle.com>); and (ii) "Scholars Note 'Decay' of Citations to Online References" by Carlson, <http://chronicle.com>, March 2005 – published in 'The Chronicle of Higher Education' (<http://chronicle.com>) is a preeminent reporter/publisher for the Higher Education and Research markets. These articles throw light on the fact that the problem solved by the claimed invention has plagued the best minds of the research and academic community. Therefore, the Appellant believes that it is doubtful that the claimed invention would have been obvious to a person with ordinary skill in the art to which the subject matter pertains or would have enabled such a person to become aware of the claimed invention through any combination of Ebrahim and Seet.

**A1. Claim 25 is separately patentable under 35 U.S.C. § 103(a) over Ebrahim in view of Seet**

***1. Independent Claim 25***

As opposed to the general limitations noted above with respect to the claimed invention as recited in independent claims 1, 13, 26, 30, and 35, the claimed invention as recited in independent claim 25 provides for a more generalized approach regarding reference material cited in a manuscript and takes into consideration whether the cited reference material is available or not yet available to an audience of the manuscript.

The system set forth in independent claim 25 includes first and second communications device and a database connected to a network. An author of a manuscript uses the first device to transfer a copy of reference material and reference material availability information to the network. An audience of the manuscript uses the second device to request and receive a copy of the reference material and the reference material availability information from the network.

The database receives a copy of the reference material and the reference material availability information from the author. The database stores an immutable copy of the reference material and the reference material availability information and a distinctive key associated with the copy of the reference material and the reference material availability information. If the reference material is available, the database transmits a copy of the reference material to the audience in response to receiving a request from the audience for a copy of the reference material. If the reference material is not available, the database transmits a copy of the reference material availability information to the audience in response to receiving a request from the audience for a copy of the reference material.

The Appellant believes that independent claim 25 is further patentable over any combination of Ebrahim and Seet as neither of these two references teach or suggest provisions for distinguishing whether or not reference material stored in a database is available or not yet available for an audience as claimed.

**B.     Claims 7-8, 11-12, 18-19, and 22-23 are patentable  
       under 35 U.S.C. § 103(a) over Ebrahim in view of Seet in further view of Clark**

Claims 7-8, 11-12, 18-19, and 22-23 depend from one of independent claims 1 and 13 and include the limitations therein. For at least this reason, claims 7-8, 11-12, 18-19, and 22-23 under 35 U.S.C. § 103(a) over Ebrahim in view of Seet in further view of Clark.

**CONCLUSION**

In view of the foregoing, the Appellant respectfully requests that the Board rules that claims 1-23 and 25-41 are patentable over the cited prior art references.

A check in the amount of \$1,045.00 is enclosed to cover the fee of \$250 for this Appeal Brief pursuant to the provisions of 37 C.F.R. § 41.20(b)(2) and the above-noted four month extension of time fee pursuant to the provisions of 37 C.F.R. § 1.17(a)(4). Please charge any additional fee or credit any overpayment in connection with this filing to our Deposit Account No. 02-3978. A duplicate of this page is enclosed for this purpose.

Respectfully submitted,

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Enclosure - Appendices VIII, IX, and X



## VIII. CLAIMS APPENDIX

1. A system for archiving reference material cited in a bibliography of a manuscript, the system comprising:

a first communications device connected to the Internet, wherein an author of a manuscript uses the first communications device to transfer identification of reference material cited by the author in the bibliography of the manuscript to the Internet, wherein the cited reference material includes a web site and the identification includes identification of the web site;

a second communications device connected to the Internet, wherein an audience of the manuscript uses the second communications device to request and receive a copy of the reference material cited by the author in the manuscript from the Internet; and

a database connected to the Internet, wherein the database receives a copy of the web site from the Internet in response to the author transferring the web site identification to the Internet such that the copy of the web site received by the database is verbatim to the web site as on the Internet at the time the author transferred the web site identification to the Internet, wherein the database stores the copy of the web site and transfers a copy of the stored copy of the web site to the audience via the Internet and the second communications device in response to receiving a request from the audience for a copy of the web site whereby the copy of the web site received by the audience is verbatim to the web site as on the Internet at the time the author transferred the web site identification to the Internet.

2. The system of claim 1 wherein:

the stored copy of the web site in the database is immutable.

3. The system of claim 1 wherein:

the database associates a distinctive key with the copy of the web site, wherein the database stores the copy of the web site and the distinctive key.

4. The system of claim 3 wherein:

the author cites the distinctive key associated with the copy of the web site in the bibliography of the manuscript along with the web site cited in the bibliography of the manuscript, wherein the audience obtains the distinctive key from the manuscript and then transmits a request having the distinctive key to the database, wherein the database transmits a copy of the stored copy of the web site to the audience via the Internet and the second communications device in response to receiving the request having the distinctive key.

5. The system of claim 3 wherein:

the database receives the web site identification in response to the author transferring the web site identification to the Internet, wherein the database stores the web site identification along with the copy of the web site and the distinctive key.

6. The system of claim 1 wherein:

the database receives the web site identification in response to the author transferring the web site identification to the Internet, wherein the database stores the web site identification along with the copy of the web site.

7. The system of claim 1 wherein:

the reference material cited by the author in the manuscript further includes an e-mail.

8. The system of claim 7 wherein:

the database receives a copy of the e-mail from the author via the Internet and the first communications device for storage and then transmits a copy of the e-mail to the audience via the Internet and the second communications device in response to receiving a request from the audience for a copy of the e-mail.

9. The system of claim 1 wherein:

the reference material cited by the author in the manuscript further includes reference material stored as a digital file.

10. The system of claim 9 wherein:

the database receives a copy of the digital file from the author via the Internet and the first communications device for storage and then transmits a copy of the digital file to the audience via the Internet and the second communications device in response to receiving a request from the audience for a copy of the digital file.

11. The system of claim 1 wherein:

the reference material cited by the author in the manuscript further includes a paper book.

12. The system of claim 11 wherein:

the database receives an electronic scanned copy of the paper book from the author via the Internet and the first communications device for storage and then transmits an electronic copy of the paper book to the audience via the Internet and the second communications device in response to receiving a request from the audience for an electronic copy of the paper book.

13. A method for archiving reference material cited in a bibliography of a manuscript by an author of the manuscript, the method comprising:

an author of a manuscript transmitting identification of reference material cited by the author in the bibliography of the manuscript to the Internet using a first communications

device connected to the Internet, wherein the cited reference material includes a web site and the identification includes identification of the web site;

transferring a copy of the web site from the Internet to a database connected to the Internet in response to the author transmitting the web site identification to the Internet such that the copy of the web site transferred to the database is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet;

storing at the database a copy of the web site;

transmitting a request for a copy of the web site from an audience of the manuscript to the database via the Internet using a second communications device connected to the Internet; and

transmitting a copy of the stored copy of the web site from the database to the audience via the Internet and the second communications device in response to the database receiving the request for a copy of the web site from the audience whereby the copy of the web site transmitted from the database to the audience is verbatim to the web site as on the Internet at the time the author transmitted the web site identification to the Internet.

14. The method of claim 13 wherein:

the stored copy of the web site in the database is immutable.

15. The method of claim 13 further comprising:

associating a distinctive key with the copy of the web site;



wherein storing at the database a copy of the web site includes storing the distinctive key with the stored copy of the web site;

the method further comprising the author citing the distinctive key associated with the copy of the web site in the bibliography of the manuscript along with the web site cited in the bibliography of the manuscript;

obtaining the distinctive key from the manuscript by the audience;

wherein transmitting a request for a copy of the web site from the audience to the database includes transmitting a request having the distinctive key to the database;

wherein transmitting a copy of the stored copy of the web site from the database to the audience is in response to the database receiving the request having the distinctive key.

16. The method of claim 13 wherein:

storing at the database a copy of the web site includes storing the web site identification along with the copy of the web site and the distinctive key.

17. The method of claim 16 further comprising:

the database transferring the distinctive key to the author via the Internet and the first communications device for the author to cite in the bibliography of the manuscript along with the web site.

18. The method of claim 13 wherein:  
  
the reference material cited by the author in the manuscript further includes an e-mail.

19. The method of claim 18 further comprising:  
  
receiving a copy of the e-mail at the database from the author via the Internet and the first communications device for storage; and  
  
transmitting a copy of the e-mail from the database to the audience via the Internet and the second communications device in response to the database receiving a request for a copy of the e-mail from the audience.

20. The method of claim 13 wherein:  
  
the reference material cited by the author in the manuscript further includes reference material stored as a digital file.

21. The method of claim 20 further comprising:  
  
receiving a copy of the digital file at the database from the author via the Internet and the first communications device for storage; and  
  
transmitting a copy of the digital file from the database to the audience via the Internet and the second communications device in response to the database receiving the request for a copy of the digital file from the audience.

22. The method of claim 13 wherein:

the reference material cited by the author in the manuscript further includes a paper book.

23. The method of claim 22 further comprising:

receiving an electronic scanned copy of the paper book at the database from the author via the Internet and the first communications device for storage; and

transmitting a copy of the electronic scanned copy of the paper book from the database to the audience via the Internet and the second communications device in response to the database receiving a request for a copy of the electronic scanned copy of the paper book from the audience.

25. A system for storing a reference material using a communications network, the system comprising:

a first communications device connected to the communications network for an author of a manuscript to use, wherein the author uses the first communications device to transfer a copy of the reference material and reference material availability information to the communications network;

a second communications device connected to the communications network for an audience of the manuscript to use, wherein the audience uses the second communications

device to request and receive a copy of the reference material and the reference material availability information from the communications network; and

a database connected to the communications network to communicate with the author and the audience via the communications network, wherein the database receives a copy of the reference material and the reference material availability information from the author, wherein the database stores an immutable copy of the reference material and the reference material availability information and a distinctive key associated with the copy of the reference material and the reference material availability information;

wherein, if the reference material is available, the database transmits a copy of the reference material to the audience in response to receiving a request from the audience for a copy of the reference material;

wherein, if the reference material is not available, the database transmits a copy of the reference material availability information to the audience in response to receiving a request from the audience for a copy of the reference material.

26. A system for archiving a web site cited in a manuscript by an author of the manuscript, the system comprising:

a first communications device connected to the world wide web, wherein an author of a manuscript uses the first communications device to transfer web site identification to the web, wherein the web site identification identifies a web site cited in the manuscript by the author;

a second communications device connected to the web, wherein an audience of the manuscript uses the second communications device to request and receive a copy of the web site; and

a database connected to the web, wherein the database receives a copy of the web site from the web in response to the author transferring the web site identification to the web such that the copy of the web site received by the database is verbatim to the web site as on the web at the time the author transferred the web site identification to the web;

wherein the database stores the copy of the web site;

wherein the database transfers a copy of the stored copy of the web site to the audience via the web and the second communications device in response to receiving a request from the audience for a copy of the web site whereby the copy of the web site received by the audience is verbatim to the web site as on the web at the time the author transferred the web site identification to the web.

27. The system of claim 26 wherein:

the database associates a distinctive key with the copy of the web site;

wherein the database stores the copy of the web site along with the distinctive key.

28. The system of claim 27 wherein:

the database transfers the distinctive key to the author via the web and the first communications device for the author to cite in the manuscript along with the web site;

wherein the database transfers a copy of the stored copy of the web site to the audience via the web and the second communications device in response to a request having the key from the audience for a copy of the web site.

29. The system of claim 28 wherein:

the database receives the web site identification from the web in response to the author transferring the web site identification to the web;

wherein the database stores the web site identification, the copy of the web site, and the distinctive key.

30. A method for archiving a web site cited in a manuscript by an author of the manuscript, the method comprising:

transferring web site identification from an author of a manuscript to the world wide web, wherein the web site identification identifies a web site cited in the manuscript by the author;

transferring a copy of the web site from the web to a database in response to the author transferring the web site identification to the web such that the copy of the web site transferred to the database is verbatim to the web site as on the web at the time the author transferred the web site identification to the web;

storing the copy of the web site in the database; and  
transferring a copy of the stored copy of the web site from the database to the audience via the web in response to a request from the audience for a copy of the web site.

31. The method of claim 30 further comprising:  
associating a key with the copy of the web site;  
wherein storing the copy of the web site in the database includes storing the copy of the web site and the key.

32. The method of claim 31 wherein:  
transferring a copy of the stored copy of the web site from the database to the audience includes transferring a copy of the stored copy of the web site from the database to the audience via the web in response to a request having the key from the audience for a copy of the web site.

33. The method of claim 32 further comprising:  
transferring the web site identification to the database in response to the author  
transferring the web site identification to the web;  
wherein storing the copy of the web site in the database includes storing the web site identification, the copy of the web site, and the key.

34. The method of claim 30 further comprising:

transferring the web site identification to the database in response to the author  
transferring the web site identification to the web;

wherein storing the copy of the web site in the database includes storing the web  
site identification and the copy of the web site.

35. A method for archiving information cited in a manuscript, the method  
comprising:

citing a web site in a manuscript;

prior to any modifications to the web site after the web site has been cited in the  
manuscript, transferring a web site address to a database via the Internet, wherein the web site  
address identifies the address of the web site on the Internet;

providing a copy of the web site from the Internet to the database in response  
to the web site address being transferred to the database such that the copy of the web site  
provided to the database is verbatim to the web site as on the Internet at the time the web site  
was cited in the manuscript;

storing the copy of the web site in the database; and

transferring a copy of the stored copy of the web site from the database to an  
audience of the manuscript via the Internet in response to a request from the audience for a  
copy of the web site such that the copy of the web site transferred to the audience is verbatim  
to the web site as on the Internet at the time the web site was cited in the manuscript.



36. The method of claim 35 further comprising:  
accessing the Internet to locate the web site prior to citing the web site in the manuscript.

37. The method of claim 36 further comprising:  
associating a distinctive key with the copy of the web site;  
wherein storing the copy of the web site in the database includes storing the copy of the web site and the distinctive key in the database.

38. The method of claim 37 further comprising:  
transferring the distinctive key from the database to an author of the manuscript via the Internet;  
wherein citing the web site in the manuscript includes the author citing the web site address and the distinctive key in the manuscript.

39. The method of claim 38 wherein:  
citing the web site in the manuscript includes the author citing the web site address, the distinctive key, and the time at which the web site was accessed.

40. The method of claim 39 further comprising:

the audience of the manuscript obtaining the distinctive key associated with the copy of the web site from the manuscript;

wherein transferring a copy of the stored copy of the web site from the database to an audience of the manuscript via the Internet is in response to the audience transferring the distinctive key to the database.

41. The method of claim 40 wherein:

the audience transfers the distinctive key to the database via the Internet.

## **IX. EVIDENCE APPENDIX**

(i) Copy of the article (3 pages total) entitled “Here Today, Gone Tomorrow: Studying How Online Footnotes Vanish” by Carlson, <http://chronicle.com>, April 2004 - published in 'The Chronicle of Higher Education' (<http://chronicle.com>) is attached herewith. As indicated above, the Appellant previously submitted a copy of this article with the Amendment dated June 10, 2004.

(ii) Copy of the article (5 pages total) entitled “Scholars Note ‘Decay’ of Citations to Online References” by Carlson, <http://chronicle.com>, March 2005 – published in 'The Chronicle of Higher Education' (<http://chronicle.com>) is attached herewith.

**X. RELATED PROCEEDINGS APPENDIX**

NONE.



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By SCOTT CARLSON

Scholarly citations in cyberspace are like atoms in various states of decay, say Michael Bugeja and Daniela Dimitrova.

Mr. Bugeja and Ms. Dimitrova, professors of journalism and communication at Iowa State University, are undertaking a study to determine what they call "the half-life of Internet footnotes." They describe that as the typical length of time it takes for half of the Web addresses in a scholarly article to become outdated, broken, or changed.

Their preliminary investigation confirms what many librarians, archivists, and scholars know firsthand: The Internet is an unstable, fluid medium, unsuitable for the long-term archiving needs of academe.

"The footnote is basic to research," Mr. Bugeja says. "If we cannot rely on a footnote because the medium is too dynamic, then Internet scholarship will always be a second-class citizen in academe. Our hope is to recommend ways to stabilize a basic element of research, so that future generations can investigate the Web and Internet-related topics with the same reliability that one would find in the library."

In their preliminary study, the Iowa State professors examined the links cited in articles accepted in 2003 by the communication-technology division of the Association for Education in Journalism and Mass Communication. Of the 108 links examined, 40 percent no longer worked. The scholars estimate that the half-life of the links included in their study is about one year and three months.

Mr. Bugeja and Ms. Dimitrova plan to expand their study to examine links used in the most popular journals in mass communication. At the end of their study, they will draw up a list of recommendations for preserving links cited in their discipline. Ms. Dimitrova says that they may recommend having either their professional association or the individual journals archive the Web pages cited in research.

**Sources Disappear**

The idea for the research came out of Mr. Bugeja's personal experience. He recently finished writing a book about technology and mass media. When he was almost finished with his first draft, he checked the Web pages he had cited and noticed that about 30 percent of them had

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vanished.

"This frightened me because this was a book about the Internet, and there was no way for me to write the book without incorporating these Web sites in my reference notes," he says.

Researchers in other disciplines have been looking into the longevity of Internet links as well.

Jonathan D. Wren, a research scientist in bioinformatics at the University of Oklahoma, recently published his research on the half-life of Web links cited in article abstracts on Medline, a database run by the National Library of Medicine.

He says he tested Web addresses found in abstracts, instead of in full-text articles, because the addresses cited in abstracts are generally essential to the content of the article.

Oddly, he says, the first two links published in Medline, in 1994, still worked. But of the 1,630 unique addresses found in abstracts over the past 10 years, 20 percent did not work. He estimates that the half-life of links in the database is seven years.

He is working with Robert P. Dellavalle, an assistant professor of dermatology at the University of Colorado Health Sciences Center, who has studied the problem of Web links in medical and science journals. They are compiling recommendations for preserving links for future researchers. Then the two scholars will present the recommendations in a letter-writing campaign, starting within a couple of weeks, to the most prestigious journals in biology and medicine.

Coming up with the recommendations, however, is a bit of a challenge. Authors can print out and keep copies of Web pages, but that doesn't help if the authors' notes disappear, or if the cited pages feature programs that perform calculations or contain music or video.

"There is a difference between passive and active content," Mr. Wren says. "Before we start the letter-writing campaign, we want to look into this and not be naïve."

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By SCOTT CARLSON

Michael Bugeja says that when he got his doctorate in English, he studied the difference between "fair" and "foul" copies of Shakespeare's plays -- a foul copy being rife with inaccuracies.

"That's because the medium of printing was unstable back then," says Mr. Bugeja, a professor of journalism and communication at Iowa State University.

Now that the Internet is the new unstable publishing medium, he and a colleague have studied how Web links stop working, or "decay," as those sites change addresses or shut down. They focused on links used by scholars in footnotes that cite Web materials.

After analyzing more than 1,126 citations that make reference to Web addresses, taken from online versions of five prestigious communication-studies journals, 373 of the links, or 33 percent, were found to be dead. Of the 753 of the links that worked, only 424 pointed to information pertinent to the citation.

Mr. Bugeja and Daniela Dimitrova, an





assistant professor of communication at Iowa State, looked at footnotes from 2000 to 2003 in *Human Communication Research*, the *Journal of Broadcasting & Electronic Media*, the *Journal of Communication*, *Journalism & Mass Communication Quarterly*, and *New Media & Society*.

"The erosion of footnotes," Mr. Bugeja says, "might put us back to a curious situation, wondering whether we have a fair copy of a journal article or a foul copy of a journal article."

In some journals, the decay rate was particularly high. For example, of the 265 citations in *New Media & Society* articles that included links, 167 did not work.

Steve Jones, a professor of communication at the University of Illinois at Chicago who is an editor of "New Media & Society," called the decay of online citations "a real issue" that the journal has begun to examine.

He wonders whether copyright law might someday allow scholars to copy and archive online articles that they used as sources. But he says such a solution is "pie in the sky."

Anthony T. Grafton, a professor of history at Princeton University who has written a book about footnotes, has read a draft of the study and agrees that citation decay is "a real problem."

"I'm looking at a world in which documentation and verification melt into air," he says. He sees this problem growing, as today's students rely more on online sources. "My students come to college less and less able to negotiate a book landscape and more and more adept at negotiating the Web."

Mr. Bugeja and Ms. Dimitrova are preparing their findings for publication and are coming up with a list of recommendations to stop the decay of online citations. Their findings and recommendations will be presented at the International Communication Association conference in May.

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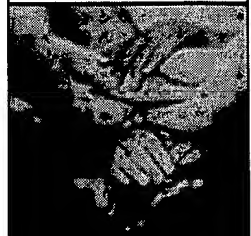
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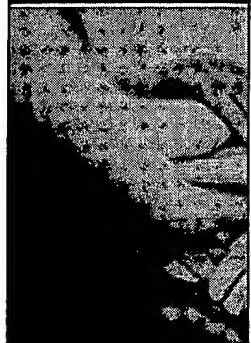
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